AMENDMENTS TO THE CLAIMS

1.   (Currently Amended) A method for image processing using signal-to-noise ratio dependent filtering, said method comprising:

measuring noise in an image;

computing a signal-to-noise ratio for <u>a region in</u> the image;

selecting parameters for an image filter framework based on the signal-to-noise ratio; and

processing the image in the filter framework using the parameters.

2.   (Original)   The method of claim 1, wherein said selecting step further comprises selecting parameters based on user preference.

3.   (Original)   The method of claim 1, wherein said selecting step further comprises selecting locally and globally varying parameters.

4.   (Canceled).

5.   (Original)   The method of claim 1, further comprising:

computing a plurality of signal-to-noise ratios for a plurality of regions in the image; and

selecting parameters for the image filter framework based on the plurality of signal-to-noise ratios.

6.   (Original)   A method for regional filtering of an image, said method comprising:

computing at least one signal-to-noise ratio for at least one region of an image;

determining a filter parameter for the at least one region based on the at least one signal-to-noise ratio; and

processing the at least one region of the image based on the filter parameter.

7.   (Original)   The method of claim 6, wherein said determining step further comprises determining the filter parameter based on user preferences.

8.   (Currently Amended) The method of claim 6, wherein said ~~selecting~~ determining step further comprises selecting locally and globally varying parameters.

9.   (Original)   The method of claim 6, further comprising the step of calculating noise in the image.

10.   (Original)   The method of claim 9, wherein said calculating step further comprises calculating noise in the image based on a difference between the image and a smoothed image.

11.   (Currently Amended) An image processing system for signal-to-noise ratio dependent processing of an image, said system comprising:

a signal-to-noise ratio processor for determining a signal-to-noise ratio for a region in an image;

a parameter selection unit for selecting at least one filter parameter for the region based on said signal-to-noise ratio; and

an image filter for filtering the region in said image based on said at least one filter parameter.

12.   (Currently Amended) The system of claim 11, wherein the signal-to-noise ratio processor determines a plurality of signal-to-noise ratios for a plurality of regions in said image ~~at least one signal-to-noise ratio for at least one region in said image~~.

13.   (Original)   The system of claim 11, wherein said parameter selection unit further selects locally varying parameters and globally varying parameters.

14.   (Original)   The system of claim 13, wherein said locally varying parameters include blend and edge-smooth parameters.

15.   (Original)   The system of claim 13, wherein said globally varying parameters include a focus parameter.

16. (Original)   The system of claim 13, wherein said locally varying parameters are determined based on a histogram of local signal-to-noise ratios.

17. (Original)   The system of claim 13, wherein said globally varying parameters are determined based on a histogram of signal-to-noise ratios for a plurality of images.

18. (Original)   The system of claim 11, wherein said parameter selection unit further comprises a lookup table relating said signal-to-noise ratio and said filter parameters.

19. (Original)   The system of claim 18, wherein said lookup table relates signal-to-noise ratios to filter parameters based on user preferences.

20. (Original)   The system of claim 11, wherein said parameter selection unit selects at least one filter parameter based on user preference.

21. (New) An image processing system for signal-to-noise ratio dependent processing of an image, said system comprising:
a signal-to-noise ratio processor for determining a signal-to-noise ratio for an image;
a parameter selection unit for selecting at least one filter parameter for based on said signal-to-noise ratio, wherein said parameter selection unit further selects locally varying parameters and globally varying parameters and wherein said locally varying parameters include blend and edge-smooth parameters; and
an image filter for filtering said image based on said at least one filter parameter.

22. (New) An image processing system for signal-to-noise ratio dependent processing of an image, said system comprising:
a signal-to-noise ratio processor for determining a signal-to-noise ratio for an image;
a parameter selection unit for selecting at least one filter parameter for based on said signal-to-noise ratio, wherein said parameter selection unit further selects locally varying

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parameters and globally varying parameters and wherein said locally varying parameters are determined based on a histogram of local signal-to-noise ratios; and

an image filter for filtering said image based on said at least one filter parameter.

23. (New) An image processing system for signal-to-noise ratio dependent processing of an image, said system comprising:

a signal-to-noise ratio processor for determining a signal-to-noise ratio for an image;

a parameter selection unit for selecting at least one filter parameter for based on said signal-to-noise ratio, wherein said parameter selection unit further selects locally varying parameters and globally varying parameters and wherein said globally varying parameters are determined based on a histogram of signal-to-noise ratios for a plurality of images; and

an image filter for filtering said image based on said at least one filter parameter.

24. (New) An image processing system for signal-to-noise ratio dependent processing of an image, said system comprising:

a signal-to-noise ratio processor for determining a signal-to-noise ratio for an image;

a parameter selection unit for selecting at least one filter parameter for based on said signal-to-noise ratio, wherein said parameter selection unit further comprises a lookup table relating said signal-to-noise ratio and said filter parameters; and

an image filter for filtering said image based on said at least one filter parameter.

25. (New) The system of claim 24, wherein said lookup table relates signal-to-noise ratios to filter parameters based on user preferences.